

ABSTRACT

The present invention relates to a method of forming a well in a semiconductor device. After a sidewall oxidization process of a trench formed by a shallow trench isolation technology is performed, an additional ion
5 implantation process is performed. In the above, the additional ion implantation process includes implanting an impurity onto the sidewalls of the trench using a deflected ion beam and implanting the ion by rotating the device 4 times. Therefore, the impurity can be implanted into all the sidewalls of the trench. It is possible to improve characteristics of the device due to
10 formation of a well in which the doping concentration of the impurity ion is uniform.